ELECTROPHORESIS MEMBER AND ELECTROPHORESIS DEVICE USING SAME

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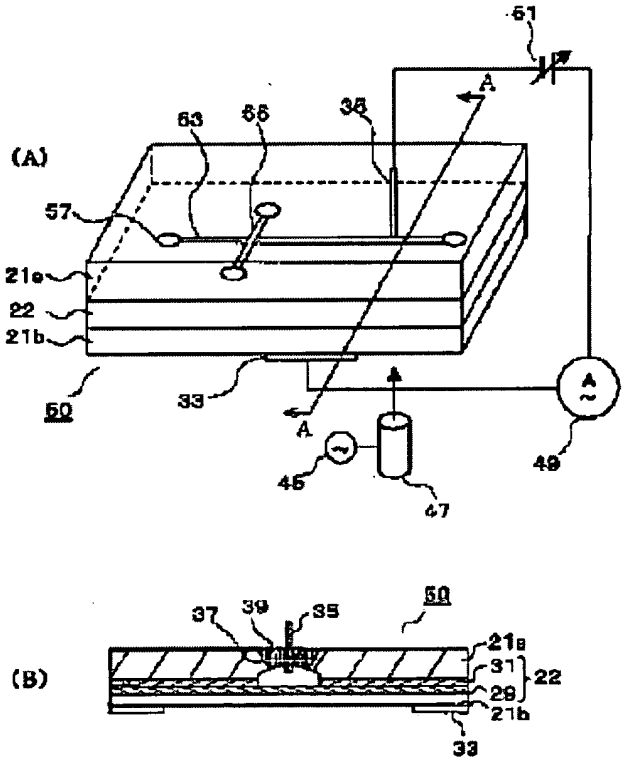
Abstract of **JP11183437**

PROBLEM TO BE SOLVED: To enable the highly accurate measurement of a trace sample in a capillary part. SOLUTION: Potential differences are provided for both ends of a channel groove 53 for separation filled with a liquid for electrophoresis to cause a sample to migrate. An insulating film/semiconductor interface formed of a silicon nitriding film 29 and a silicon substrate 21b formed so as to cover the channel groove 53 for analysis is irradiated with light modulated into a predetermined frequency form the side of the silicon substrate 21b by a laser light source 47 and is, for example, impressed with a bias voltage V of 1 V by a voltage impressing power source 51, and a generated optical a.c. current I is measured by an optical a.c. current measuring device 49. As a result, it is possible to detect changes in the pH values of a capillary part irradiated with laser light as changes in the optical a.c. current I, and it is possible to detect even a trace sample without impairing detection sensitivity.



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